

Remarks

Claims 1-13 are pending in this action and stand rejected. By this amendment claims 2, 4, 6 and 7 have been amended and reconsideration of all pending claims is respectfully requested.

Claim Objections

The Examiner objected to claims 6 and 7 because the recited "switch module" lacked antecedent basis. Applicants have corrected claims 6 and 7 to overcome the Examiner's objection by restating the "switch module" as a "switching module."

Claim Rejections - 35 U.S.C. § 112

The Examiner rejected claim 4 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner indicated that the recited "additional byte configuration" lacked antecedent basis. Accordingly, Applicants have amended claim 4 to overcome the Examiner's rejection by restating "the additional byte configuration" as "a header byte configuration."

Claim Rejections - 35 U.S.C. § 102(e)

The Examiner rejected independent claims 1, 8, 9 and 10 under 35 U.S.C. § 102(e) as being anticipated by U.S. Pat. No. 6,501,734 issued to Yu. The Examiner stated that Yu discloses a switching module, structure and system comprising various elements that correspond to the limitations recited in Applicants' independent claims herein. Initially, Applicants respectfully submit that Yu is directed to a structure and method to dynamically allocate bandwidth slots of an *external* memory between multiple data ports (Yu, Abstract) and not to a structure and system to route ATM based data packets to an ultimate destination node without modification of the packet header. (Applicants' Spec. Para. 0006, Abstract.) As such, Yu discloses a fundamentally different architecture than the present invention.

The Examiner stated, for example, that the Media Access Control (MAC) unit taught by Yu is equivalent to the first receiver of Applicants' invention, a limitation recited in each of

Applicants' independent claims 1, 8, 9 and 10. (2d O.A. p. 4) However, Applicants respectfully submit that the MAC unit of Yu implements a memory interface to support routing of data packets between Ethernet ports serving the workstation and the gigabit node. (Yu, Col. 4, lines 36-46) The MAC unit of Yu includes a memory interface unit that assigns low bandwidth ports to a fixed bandwidth slot of an external memory and dynamically allocates reserved bandwidth slots of an external memory to high bandwidth ports based on a memory allocation request. (Yu, Col. 2, lines 5-9, 15-18) Most notably, the external memory of Yu is not integral to the ATM switch structure (Yu, Fig. 1, Col. 2, line 15-18, Col. 6, lines 57-60) and therefore does not correspond to the limitation herein of a first or second memory integral to the first receiver. (Applicants' Spec. Para. 30 and Claims 1, 8, 9, and 10 ("... a first receiver which stores a first plurality of data packets in a first memory or a second memory of the first receiver ...").

More specifically, Applicants' receiver unit corresponds to the select data_in logical circuit 202. (Applicants' Spec. Par. 0022, Figs. 2 and 3) Each select data_in circuit contains eight identical "select data_in" logical blocks 203-1 to 203-8 (Applicants' Spec. Par. 0023, Fig. 2). The select data_in logical blocks include an internal memory 206 and an expansion memory 308. (Applicants' Spec. Par. 0030) The expansion memory of Applicants' first receiver (data_in select logic, 203-1) is used to store data packets with destination addresses outside the range of the primary switch module. (Applicants' Spec. Para. 30, Fig. 3) In this regard, Applicants assign a range of legal address values for each switching module and route received data packets, based on this assignment, to either the internal memory location or an expansion memory location – both residing within the data_in logical block (first receiver). Inasmuch as Applicants' recitation of a first receiver having a first memory and a second memory is not equivalent to the MAC unit of Yu, which is characterized by a memory interface that is coupled to an external memory, the Examiner's rejection is improper and should be withdrawn.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. (MPEP §2131) Therefore, Applicants respectfully submit that the Examiner's rejection of claims 1, 8, 9 and 10 under 35 U.S.C. § 102(e) has been overcome.

Claim Rejections - 35 U.S.C. § 103(a), first paragraph

The Examiner rejected claims 2-7 and 11-13 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 6,501,734 to Yu in view of U.S. Pat. No. 5,689,500 to Chiussi. As noted above, Yu does not anticipate Applicants' invention and therefore no motivation exists to combine Yu with Chiussi. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. (MPEP §2143.01) As such, a prima facie case of obviousness has not been established.

Moreover, Chiussi is directed to an ATM based switch architecture that handles multicast switching operations by modifying the ATM header. (Chiussi, Col. 4, lines 25-31 and 58-63) Conversely, Applicants' system expressly avoids changing the packet address when it is necessary to change a switch module routing. (Applicants' Spec. Para. 0044) In other words, Applicants' invention routes the received data packets to their final destination without modifying the data packet header. (Applicants' Spec. Para. 0006, Abstract) Instead, Applicants assign a range of legal address values for each switch module and route received data packets, based on this assignment, to either the internal memory location or an expansion memory location of the data_in logical block. Accordingly, Chiussi, either alone or in combination with Yu, does not suggest or motivate the data packet ranging and detection system disclosed by Applicants. Indeed, Chiussi teaches away from Applicants' approach because the invention herein requires no modification of the ATM cell header. Indeed, the multicast operation of Chiussi is implemented using an entirely different method from Applicants' invention.

Therefore, Applicants respectfully submit that the Examiner's rejection under 35 U.S.C. § 103(a) has been overcome.

Conclusion

Based on the foregoing, it is respectfully submitted that the pending claims in the subject patent application are in condition for allowance and that the application may be passed to issuance.

The Examiner is urged to call the undersigned at the number listed below if, in the Examiner's opinion, such a phone conference would aid in furthering the prosecution of this application.

Respectfully submitted,

For: Alain Benayoun, et al.

By: Michael J. LeStrange

Michael J. LeStrange

Registration No. 53,207

Telephone No.: (802) 769-1375

Fax No.: (802) 769-8938

EMAIL: lestrange@us.ibm.com

International Business Machines Corporation
Intellectual Property Law - Mail 972E
1000 River Road
Essex Junction, VT 05452

FR920000052US1
SN 09/683,231